

Claims

1. An imaging device comprising
at least two image capturing apparatus, each apparatus being arranged to produce an image, wherein at least one first apparatus comprises a color filter matrix of red and blue elements, and at least one second apparatus comprises a green color filter,

a controller arranged to combine the images produced with the apparatus with each other to produce an image with an enhanced image quality.

2. The device of claim 1, further comprising a controller arranged to produce a single color image from the image taken with the second apparatus.

3. The device of claim 1, wherein the second apparatus comprises a color filter matrix of green elements.

4. An imaging device comprising
a lenslet array with at least three image capturing apparatus, each apparatus being arranged to produce an image, wherein a first apparatus comprises a red color filter, a second apparatus comprises a blue color filter, and a third apparatus comprises a green color filter, each apparatus comprising an image sensor, wherein the image sensor of the third apparatus is larger than the image sensors of the first and second apparatus, and

a controller arranged to combine the images produced with the apparatus with each other to produce an image with an enhanced image quality.

5. The device of claim 4, wherein the image sensor of the third apparatus is at least twice as large as the image sensors of the first and second apparatus.

6. An imaging device comprising
a lenslet array with at least three image capturing apparatus, each apparatus being arranged to produce an image, wherein a first apparatus comprises a red color filter, a second apparatus comprises a blue color filter, and a third apparatus comprises a green color filter, each apparatus comprising an image sensor consisting of pixels, wherein the number of pixels in the image sensor of the third apparatus is larger than the number of pixels in the image sensors of the first and second apparatus, and

a controller arranged to combine the images produced with the apparatus with each other to produce an image with an enhanced image quality.

7. The device of claim 6, wherein the number of pixels in the image sensor of the third apparatus is at least twice as large as the number of pixels in the image sensors of the first and second apparatus.

8. A method of creating an image file in an imaging device, comprising

producing images with at least two image capturing apparatus, wherein at least one first apparatus comprises a color filter matrix of red and blue elements and at least one second apparatus comprises a green color filter.

9. The method of claim 8, further comprising: combining the images produced with the apparatus with each other to produce an image with an enhanced image quality.

10. The method of claim 8, further comprising: producing a single color image from the image taken with the second apparatus.

11. A method of creating an image file in an imaging device comprising a lenslet array with at least three image capturing apparatus, the method comprising

producing a first image with a given resolution with a first apparatus comprising a red color filter,

producing a second image with a given resolution with a second apparatus comprising a blue color filter,

producing a third image with a given resolution with a third apparatus comprising a green color filter, wherein the resolution of the third apparatus is larger than the resolution of the first and second apparatus, and

combining the images produced with the apparatus with each other to produce an image with enhanced image quality.